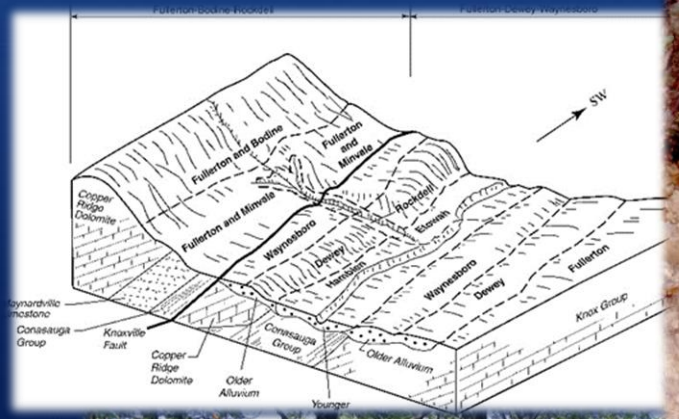
South Region Cooperators Soil Survey Conference

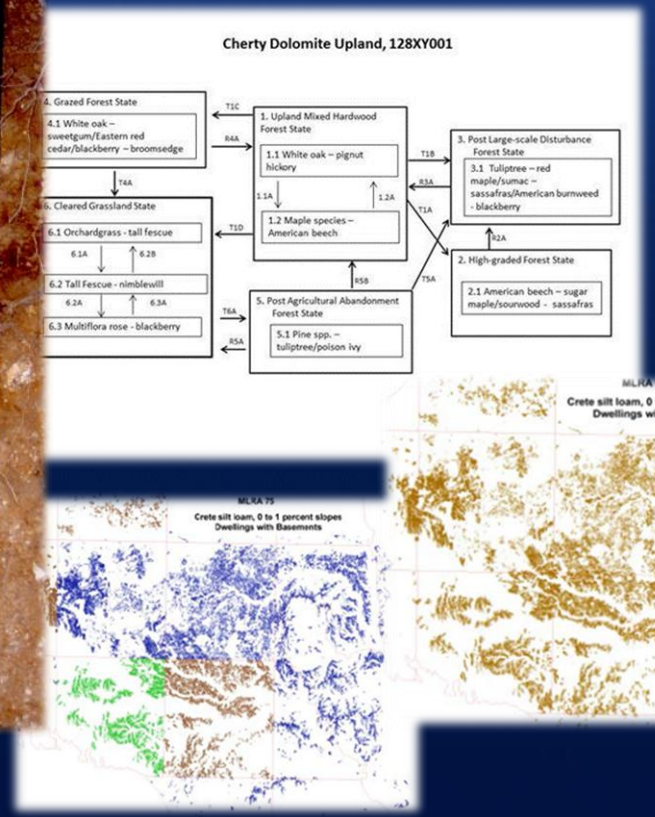
Soil Survey Regional Directors Panel Discussion

SDJR and Future Soil Survey Update and Ecological Site Inventory

- Create continuous and joined coverage within the attribute database through a process of data harmonization.
- Established future soil survey update 5-year and 10-year project plans from these regional SDJR evaluation efforts.
- Improved soil properties and interpretations.
- Identified soil survey investigation/research project.
- Develop ‘soil component - ecological site inventories and correlations’ by implementing a ‘Data Informed Decision Making’ process.

The Road Ahead





The Answer Lies in the Cooperative

Priorities for Soil Survey Activities

National Soil Survey Handbook 610

Recently Revised – Updated Version is on the web

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/ref/?cid=nrcs142p2_054219#00

610.00

a. Definition - A major land resource area (MLRA) soil survey update is a systematic process designed to improve official soil survey products and information with consideration of the full extent of soils and map units across the major land resource area. The MLRA soil survey update is planned and organized using scheduled projects that systematically focus on specific groups of soils or landforms and the associated support data, interpretations, and maps.

Priorities for Soil Survey Activities

National Soil Survey Handbook 610

b. Purpose

Project plans are coordinated across the existing (i.e., “traditional” or “non-MLRA”) soil survey area boundaries and follow natural landforms.

The MLRA process facilitates mapping, interpreting, and delivering seamless soils information across broad geographical areas of common resource values, land uses, and management concerns.

The Collaborative Effort

Technical Team

- Soil Survey Office Staff
- Soil Survey Regional Office Staff
- Resource Soil Scientists
- Federal, State, University, and other NCSS partners
- Discipline specialists from field, area, State, or regional offices

Management Team

- Soil Survey Regional Directors
- State Soil Scientists
- State Resource Conservationists
- Other state technical leaders
- Federal, State, University, and other NCSS partners

Board of Advisors

- State Conservationists
- Federal, State, University, and other NCSS partners

Priorities for Soil Survey Activities

610.03 Update Strategies

a. Definition

Strategies to update soil survey data, both attribute and spatial data, are designed to implement effective actions and make efficient use of time and staff resources.

b. Purpose

Strategies provide the tactical framework from which to initiate, conduct, and deliver updated soils information to the users.

Priorities for Soil Survey Activities

610.03 Update Strategies

c. Update Strategies

1. MLRA recorrelation soil attribute data
2. MLRA field projects
3. Survey boundary polygon joins
4. Recompiling to planimetric base
5. Special investigations and/or monitoring
6. Extensive revision *
7. Supplemental mapping *

Setting Priorities for Soil Survey Activities

The Collaborative Effort

610.04 Project Plan

c. Setting Project Priorities

1. Projects are prioritized to balance local needs with National and State Issues.

2. Input from technical teams and cooperators is important in determining local priorities.

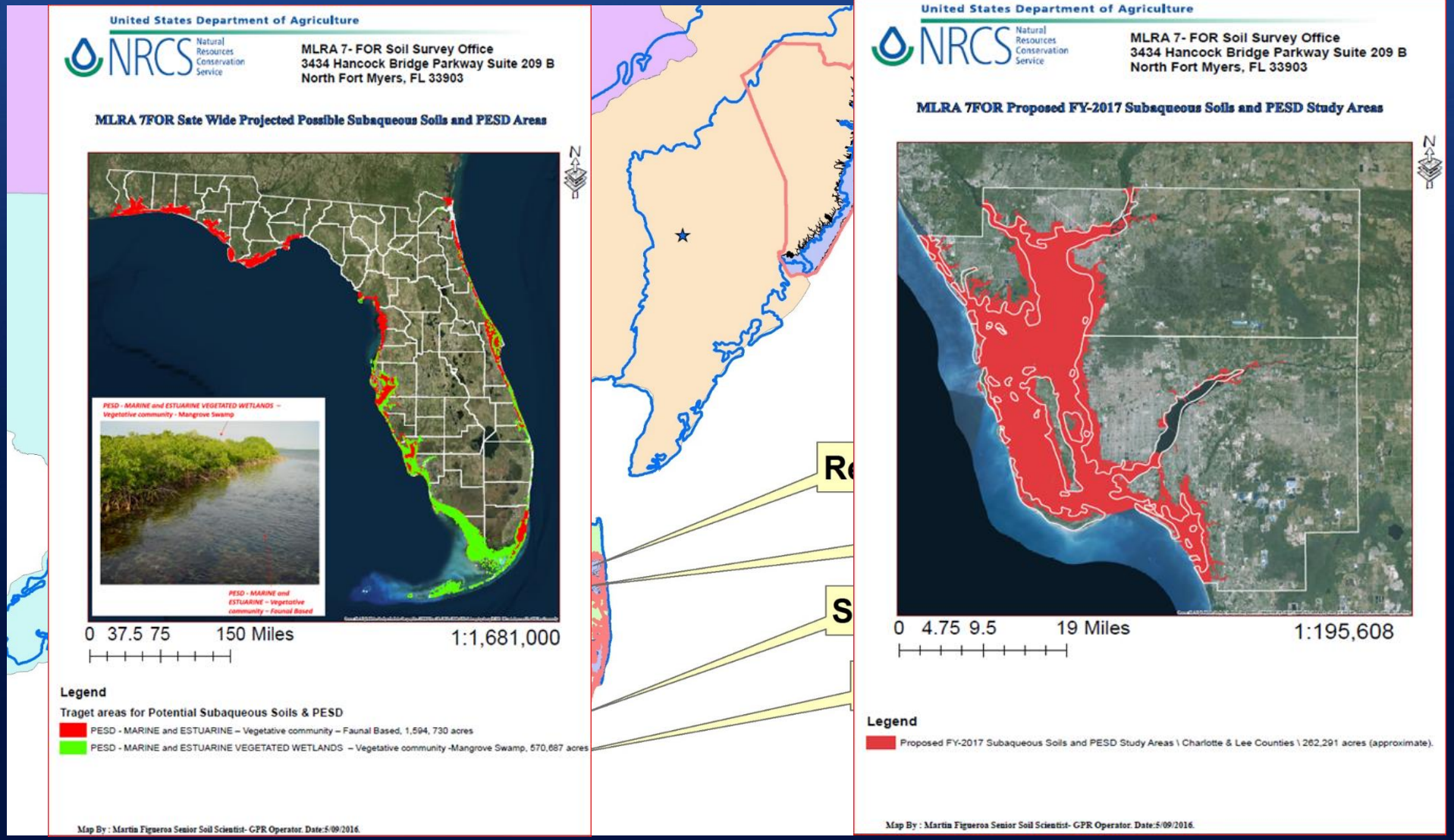
3. Technical teams develop the criteria for ranking projects.

4. Exhibit 610-5 – Example of Project Evaluation Ranking Procedure

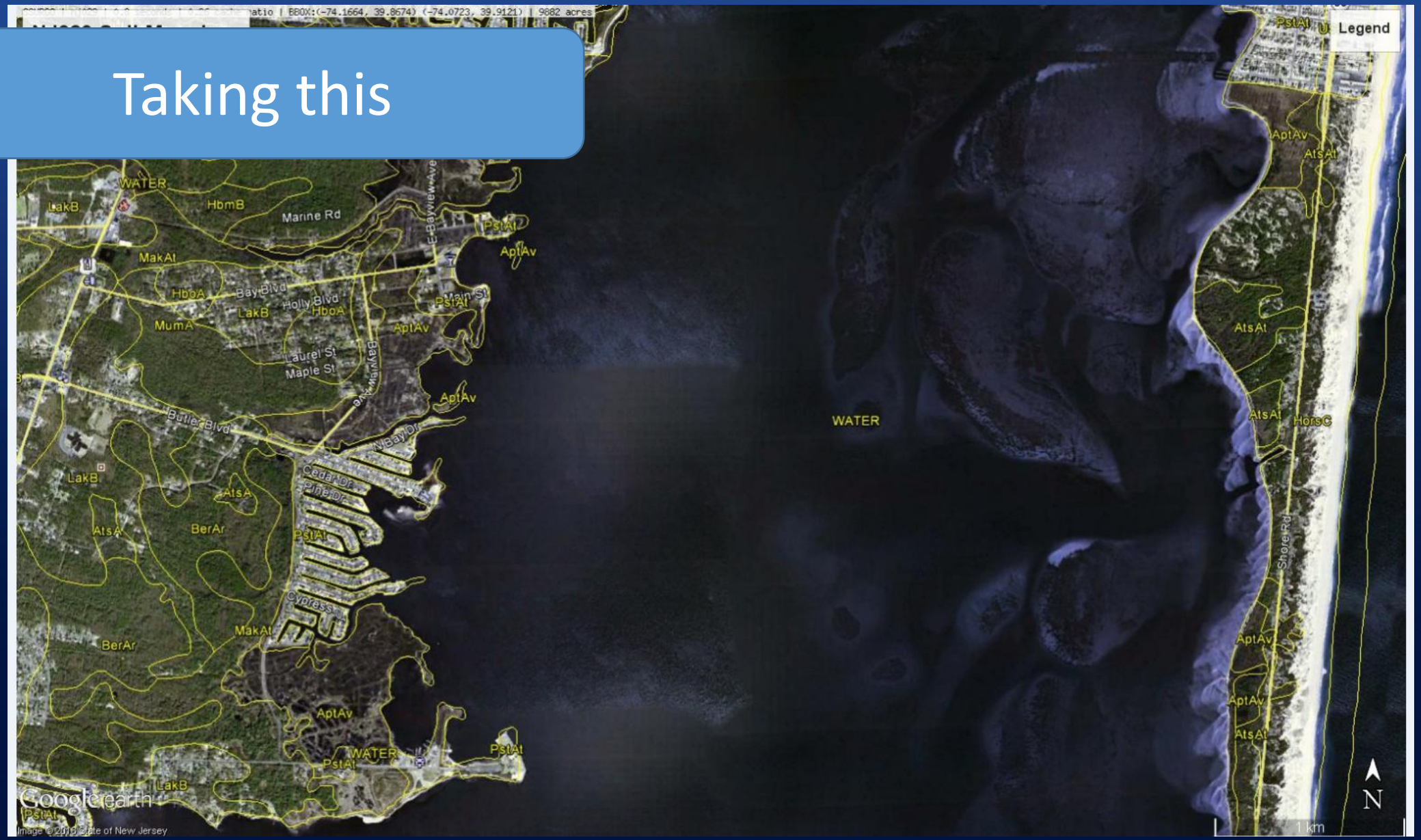
The Collaborative Effort
Communication is the Key for Successful Planning

- Initial Soil Survey
- MLRA Update Soil Survey
- Ecological Site Development
- Urban Soil Mapping
- Special Investigations (Soil Temperature Monitoring, Soil Water Monitoring, Soil Health Monitoring)
- Technical Soil Services
- Recompiling the planimetric base
- Survey Boundary Polygon Joins
- Subaqueous Soil Mapping and Investigation

Current and Future Subaqueous and Coastal Zone Soil Surveys

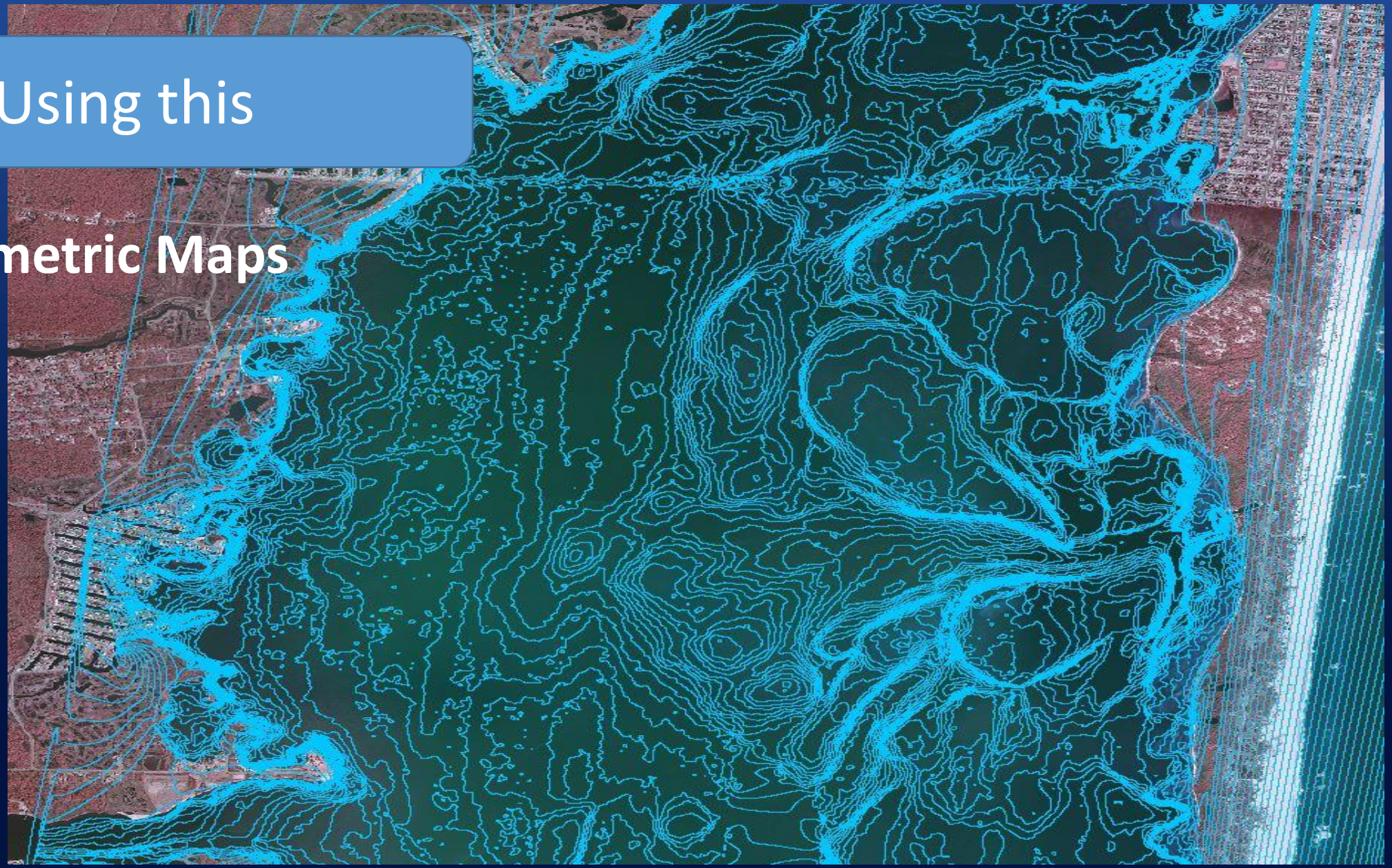


Taking this


Legend
WATER
LakB
HbmB
Marine Rd
MakAt
HboA
Bay Blvd
Holly Blvd
MumA
Laurel St
Maple St
Butler Blvd
E Bayview Ave
W Bay Dr
Cedar Dr
Pine Dr
Cypress
AtsA
BerAr
PstAt
AptAv
HorsC
Shore Rd
Google earth
Image © 2019 State of New Jersey
1 km
N

Using this

Bathymetric Maps



Identifying these

Subaqueous Landforms

Estuarine Tidal Creek

Lagoon Bottom

Lagoon Bottom Barrier Side

Storm Surge Washover-Fan Flat

Flood-tidal Delta Flat

Flood-tidal Delta Slope

Flood-tidal Delta Channel

Relict Flood-tidal Delta Flat

- ***Relict Flood-tidal Delta Slope***
- **Submerged Wave-cut Platform**
- **Submerged Mainland Beach**
- **Mainland Cove**
- **Shoal**
- **Dredge Channel**
- **Dredge-Deposit Shoal**

To make this


NJ029 Subaqueous Soil Mapping
Legend
WATER
LakB
HbmB
Marine Rd
MakAt
HboA
Bay Blvd
Holly Blvd
LakB
HboA
MumA
Laurel St
Maple St
Bayview Ave
Butler Blvd
N Bay Dr
Cedar Dr
Pine Dr
AtsA
BerAr
PstAt
Cypress
MakAt
BerAr
AptAv
WATER
PstAt
LakB
PstAt
AptAv
Main St
AptAv
AptAv
WATER
AptAv
AtsAt
AtsAt
HorsC
Shore Rd
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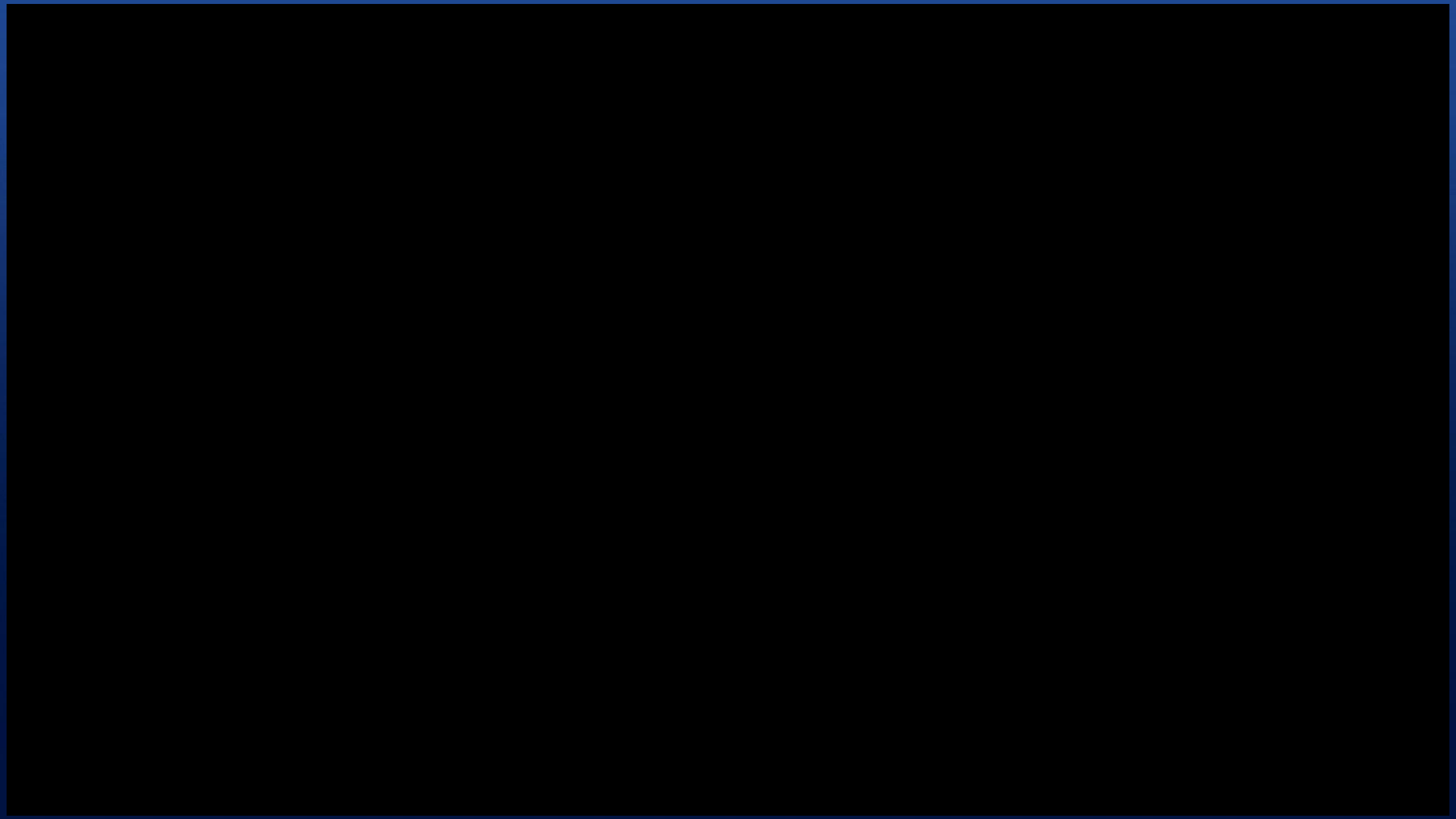
1 km
Google earth



Preguntas?

USDA United States Department of Agriculture

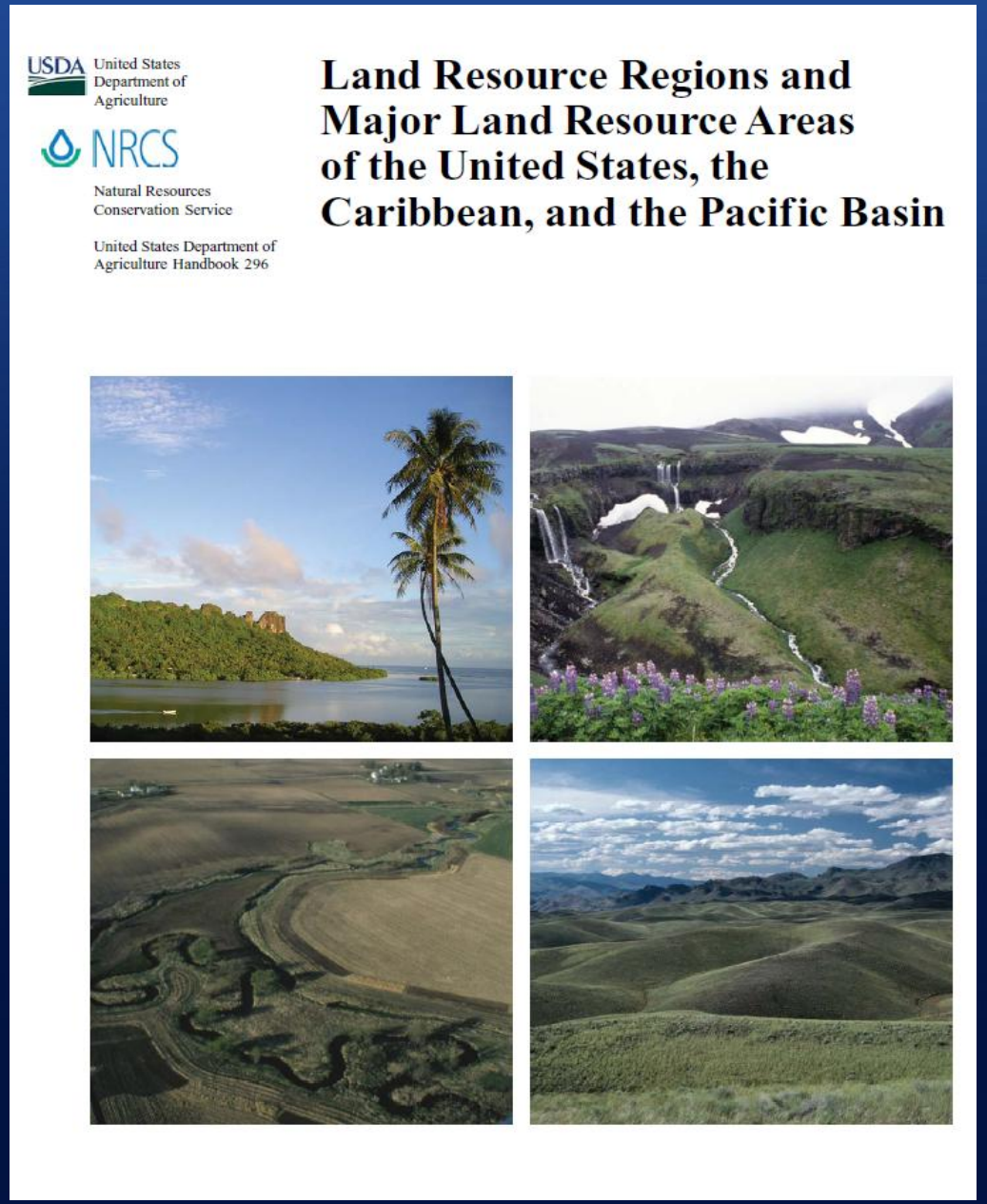
Helping People Understand Soils

Natural Resources Conservation Service

AG HANDBOOK 296 UPDATE

WHY?

1. Concepts for boundaries have changed in some, but not all, regions
2. Increase accuracy of existing boundaries
3. Increase cartographic quality
4. Opportunity to create new LRUs if needed
5. Updated maps and definitions will enhance Ecological Site Descriptions



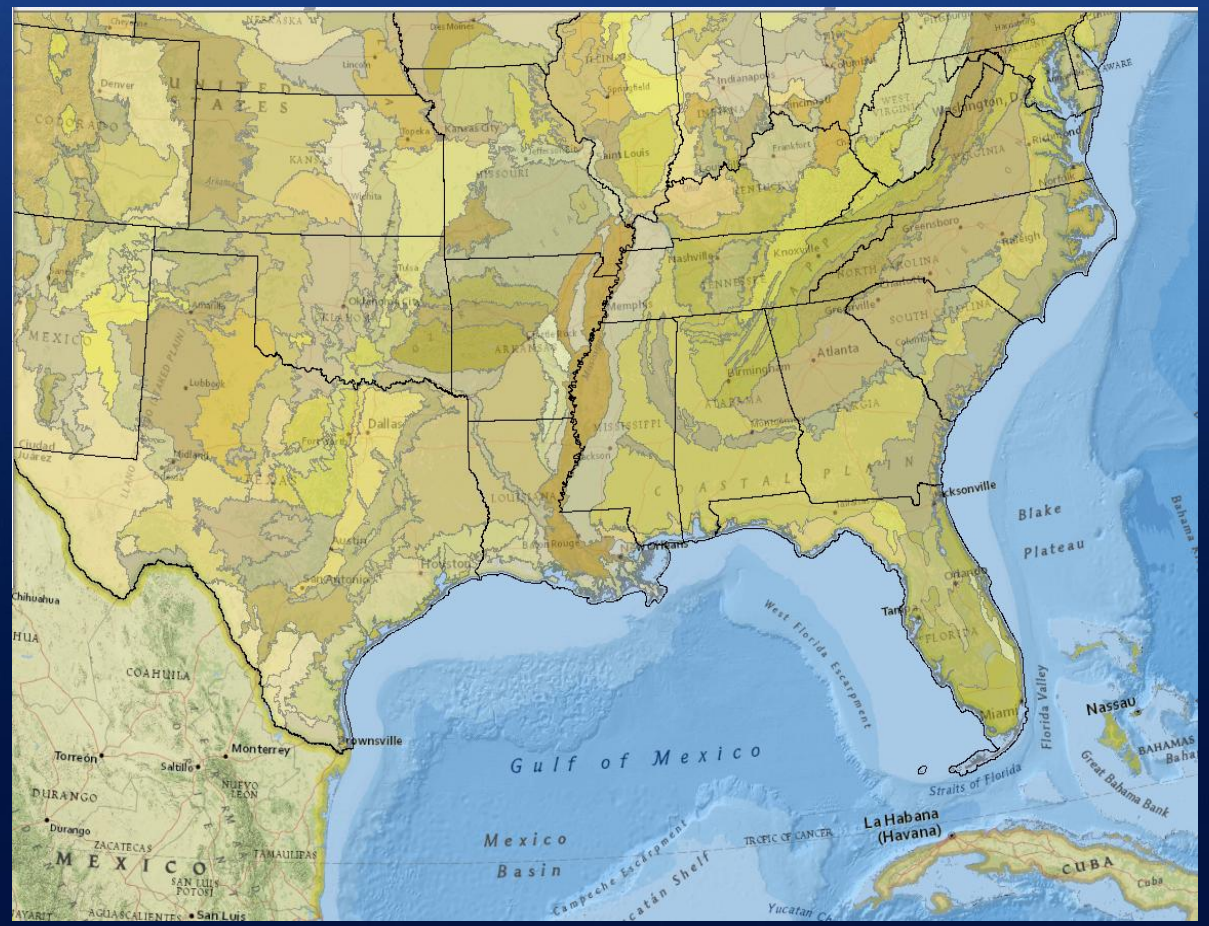
AG HANDBOOK 296 UPDATE

WHEN?

1. CY16 – The current status of LRUs and MLRAs will be compiled as maps at the NSSC and distributed to SSD staff and collaborators for evaluation.

2. CY17 – Regions decide which, if any, LRR, MLRA, LRU, or CRA polygons should be adjusted, created, or combined

3. CY17, CY18+ – Polygons and definitions are submitted.



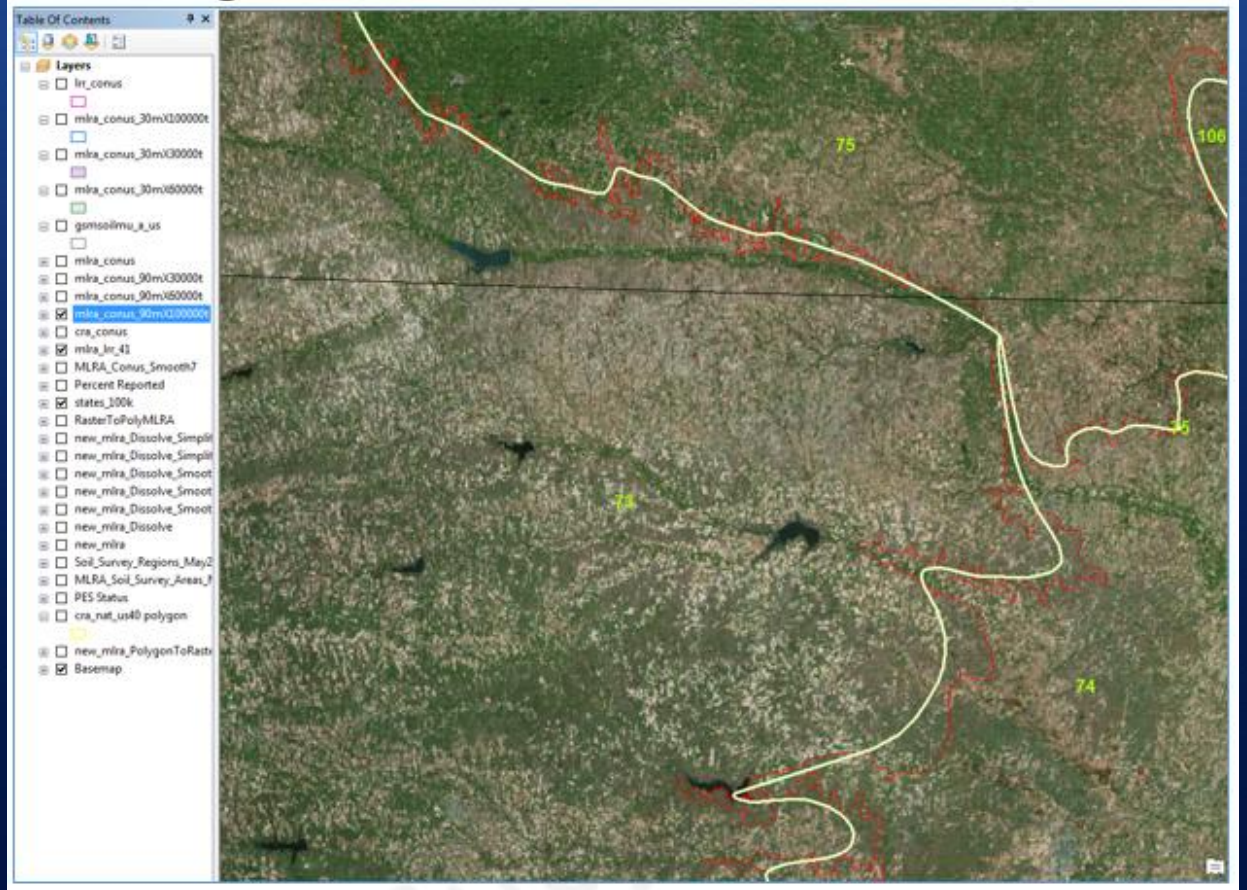
AG HANDBOOK 296 UPDATE

HOW?

Following standards in NSSH Part 649:

1. New map scales
   - LRR = 1:7.5 M
   - MLRA = 1:5 M
   - LRU = 1:1 M
2. Change symbol use
   - MLRA are numeric (108)
   - LRUs are numeric/alpha (108A, 108B)
3. Line smoothing to match map scale
4. Develop and review definitions
5. Digitally publish maps and AH296 as an on-going product

Smoothing MLRA Publication lines



Many, during SDJR, considered the detail in the MLRA boundary to be an exact SSURGO line match for assigning map units into MLRAs. There have been many arguments. But remember that that MLRA boundary is about 7 football fields wide, compared to the 20 foot SSURGO line.

Soil Science Division Recruit Pathways Students and Agency Succession Planning

- Overview Pathways Process
- Lessons Learned – 1890 program vs Pathways student program
- Status on the number of students participating
- Number of students needed within the next few years